“Making up shit” |

the drama of the mind-body problem

Cast: René Descartes, Princess Elisabeth of Bohemia, and Lisa Feldman Barrett

Your brain’s most important job is not thinking. It’s not feeling. It’s not seeing or hearing or sensing in any way. Your brain’s most important job is regulating your very, very, very complicated body. And everything your brain does, psychologically speaking, is in the service of regulating that body.

– Lisa Feldman Barrett[1]

I think, therefore I’m pretty sure I’m not.

– Bianco Luno[2]

The philosopher, the Princess, and the neuroscientist

Descartes came to be regarded as the father of modern philosophy by inquiring into what we may know with the greatest certainty and by answering, ultimately, that we can only know for sure that we exist as thinking things. Though, he thought, we can also reason our way to conclude that everything else that

1. Pufendorf Lectures 2024, Day 2 - Constructing the Mind. How prediction works (and backward causation) at 32 minutes in.
2. Unpublished “Philosophical Provocations.”

seems to exist, probably *does* – thanks to the fact that God is not a jerk.[3] The basis of his initially skeptical program in the *Meditations* relied on having asserted a radical separation of the physical and the mental, with the latter having the stronger claim to reality. This, because it was less mediated by bodily faculties – less has to be *inferred* (as opposed to *experienced*) about what exists if we start with the mental.[4]

> I have to say that I would find it easier to concede matter and extension to the soul than to concede that an immaterial thing could move and be moved by a body. On the one side, if the soul moves the body through *information* [French word], the spirits would have to think, and you say that nothing of a bodily kind thinks. On the other side, you show in your *Meditations* that the body could move the soul, and yet it is hard to understand that a soul (as you have described souls), having become able and accustomed to reasoning well, can lose all that because of some vaporous condition of the body; and that a soul that can exist without the body, and that has nothing in common with the body, is so governed by it.
>
> – Elisabeth to Descartes, 1643

But the mind/body bifurcation of reality opened a can of worms which came to be known as "the mind-body problem." Curiously, it wasn't Descartes who first noticed how philosophically serious this move was. It was a young contemporary, Princess Elisabeth of Bohemia, who wrote him asking how the physical and the mental could interact, given how utterly unlike they are to each other as he, Descartes, insisted on describing them. We have some notion how physical things mess with each other. We can observe objects striking each other and observe the consequences. We employ mental entities, like reasons, for example, in combination to produce conclusions, "reasons" and "conclusions" being purely mental things. That the mental was a category, separate from the physical, she granted, but how does the *purely* physical impinge upon the *purely* mental or vice versa? How does a thought make a hand move? Or a sense perception create a thought? Descartes answered lamely… something to the effect of "well, we *know* they do."

That wasn't the Princess' question. *How?... Where did Descartes' premium on clarity and distinctness flee to?*

> I find from your letter that the senses show me that the soul moves the body, but as for how it does so, the senses tell me nothing about that, any more than the intellect and the imagination do. This leads me to think that the soul has properties that we don't know—which might overturn your doctrine, of which I was persuaded by your excellent arguments in the *Meditations*, that the soul is not extended. This doubt seems to be supported by the rule that you give there for handling issues of truth and falsity, saying that all our errors come from our forming judgments about things that we don't perceive well enough. Although extension is not necessary to thought, it isn't inconsistent with it either; so it may flow from something else that the soul does that is no less essential to it than thought is. At least it—the thesis that the soul is

3. The notion of God as omniscient, omnipotent, and omni-benevolent insures that a being so-described would not permit our systematic deception. We cannot be brains in a vat or playthings of an evil demon or in a Matrix-type situation. If we are sometimes seriously mistaken about our condition or what we feel certain about, this can be chalked up to our flawful nature, but no all-good god would play such games... Thus, Descartes.

4. The mental might exist without the physical. The physical without the mental? Who or what could *remark* on the existence?

> extended—pulls down the self-contradictory doctrine of the scholastics that the soul is entirely present in the whole body and entirely present in each of its parts. As for the thesis itself, I plead guilty to having confused the notion of the soul with that of the body for the same reason that the vulgar do; but this acknowledgment of error still leaves me with my initial doubt, i.e. my thinking that perhaps after all the soul is extended, and if you—who single-handedly kept me from being a sceptic—don't clear away this doubt to which my first reasoning carried me, I'll lose hope of ever being certain of anything.
>
> – Elisabeth to Descartes, 1643

Descartes' final answer to Elisabeth seems to belie his dualist metaphysics, not by falling back on the physical monism Elizabeth entertains but by suggesting almost a "triplist" solution. There may be:

- body,
- soul, and
- *their union*

each *irreducibly* basic. The latter is the most obscure to us and needing conceptual elucidation. Something happens when there is phenomenological evidence of the combination of the first two. There is *extended* body, *non-extended* soul, and something non-extended *but*, nevertheless, empirically evident emerges in their union.

How do we understand this? Perhaps, eventually, science will enlighten us. Descartes may have thought so. (We will consider scientist Lisa Feldman Barrett contemporary attempt, shortly.)

Descartes and the Princess remained respectful of each other to the end:

> Many other people, including ones with high intelligence and great learning, find my works very obscure. In most cases, someone who is accomplished in metaphysics hates geometry, whereas those who have mastered geometry don't grasp what I have written on First Philosophy [= 'metaphysics']. I'm right to use the word 'incomparable': yours is the *only* intellect I have encountered that finds everything equally clear. [He adds some praise of the princess's youth and beauty.] I see that everything required for perfect and sublime wisdom, both in intellect and in will, shines forth in your character. Along with your royal dignity you show an extraordinary kindness and gentleness which, though continually buffeted by the blows of fortune, has never become embittered or broken. I am so overwhelmed by this that I want this statement of my philosophy to be offered and dedicated to the wisdom that I so admire in you—for philosophy is just the study of wisdom.
>
> – Descartes to Elisabeth, 1644
> (from the dedicatory letter to the Princess prefacing his *Principles of Philosophy*)

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In the time since, offering solutions to this problem has occupied philosophers and other thinkers concerned with understanding the relation, if any, between mind and body. The latest and, perhaps, most intriguing theory comes from a contemporary psychologist/neuroscientist/philosopher of science

Lisa Feldman Barrett. She concludes from her 30 years of empirical research into how the brain works – and as one of the most cited neuroscientists in the world – that the brain *creates* both body and mind, indeed, all of reality... *all of it*, without exception. Hers is a metaphysics of *signals*, quantities varying over time, and the interactions of signals with signals create all the items that furnish the universe. She calls this sweeping claim "Relational Realism." Things exist *only* in relation to each other... Even the brain itself is generated this way... Our brain "makes up shit" as it goes (her phrase) – whatever shit necessary to make things cohere – coherence-optimization being the "metabolically" least expensive way to cope. Coping successfully conduces to survival.

This, she is suggesting, is the full extent and significance of what constitutes *reality*.

The theory of constructed reality

Barrett's theory starts with explaining *emotion,* which evolutionarily and conceptually comes before the *mind* and its explanation, then proceeds to explain the construction of *reality.* Barrett calls this metaphysical theory "relational realism." The theory says that the Andromeda galaxy, the little toe on your left foot, the taste of chocolate, the Second Law of Thermodynamics, and your brain itself, etc. is made up shit. Meaning is *imposed* on a collision of signals, which are just quantities varying over time. (Quantities of *what?* We can't answer without already *imposing* meaning on something or other.) Concepts and the supposed objects they refer to are the consequence of internal and external signals[5] crossing paths creating an item for the biological brain to interpret in light of *two biological imperatives:* 1) survival and 2) survival sufficiently long to reproduce. This is how "information" or meaningful signals are created from fluctuating quantities which, before being anthropogenically processed, cannot even be characterized as proper "noise" without already imposing meaninglessness on them. They are not *yet* noise. *Noise*, itself only comes into being on *meaningful signals* having been sorted from it. And we are not positioned to know what is noise and what is meaningful until we measure the *usefulness* of the signals against those imperatives.

Everything not in the service of these imperatives is either not noticed or, if noticed and it detracts from the energy needed to serve those goals, deprecated. Engaging too much in deprecated activity is naturally selected against. The individual or class of individuals persisting, beyond a highly contingent margin for error, in such activity goes extinct. We are here because most of the time, at least up to now, our species has minded the business of serving the imperatives. There is a reality because – whatever else we are – we are here *noticing*.

The fact that the service of these biological imperatives can be immensely complex is what may obscure the connection between all that we call "culture" and "nature," for instance, their meaningfulness, on the one hand, and the stark simplicity of those imperatives, on the other. Thus, we do not immediately see the most abstract of our activities – speculation about the origin of the

5. Even the external/internal distinction dissolves in this theory. This is why the mind/body problem appears obviated under this theory. Neither body nor mind exist (in the older sense) to interact. They are a "location" (not in the space of physics but in conceptual space) where signals cross. Concepts are signals crossing. The "brain" is the conceptualized name where the signals are conferred significance. You may as well call this location immaterial "mind" for all the difference it makes.

universe or God's existence or the beauty of Euler's identity – are related to the imperative to survive literally or virtually.[6] (Assuming these are the only imperatives in play.) We worry about making ourselves unintelligible to each other through self-contradiction. But why should we think *nature* – what is external, if anything is, to us – gives a damn? Making it all cohere is *our* problem. *We* need to make sense of things to persist – as organisms seeking to preserve something of their identity, at least for those who abstract from raw experience any such notion as "identity."

For example

Naive realism insists there is a reality out there independent of us. That there is, or was, a God, or at least a mindless, careless, ordered, or unordered nature that would be *even if we had never existed* to notice. This speculation is more than a little rich, the theory of *relational* realism would argue. *If* – and it's a big *if* – making up such ontological shit can be shown to serve the imperatives by whatever long and convoluted path, then we will persist in indulging such a metaphysics. Because it has, or does, *work*. Work for what? *Again, the imperatives.* It remains productive and fruitful for the project of our persisting by whatever means necessary. *Truth, the only sense of it we can fathom, exists to serve life.* Our resources are finite and our metabolisms must operate from within what makes itself available. The instant the expenditure of energy in maintaining one of our mental concoctions (abstractions) ceases to be the most efficient path to serve the only end we can imagine relevant to us, we are ripe for extinction, unless we have the luxury of getting creative. If it isn't metabolically efficient to believe God exists – or doesn't, it's a waste to have *any* beliefs about it. Ditto for mind, body, reality, etc...

Of course, that it has or does work, says nothing about *will it continue* to work while we are still chained to the fact that we cannot conceptualize novelty without reference to the past.[7] Until we face an obstacle to comprehension, we are on automatic pilot. It's a metabolically "best practice" to do so. Experience shows. *Until it doesn't.* Then what? Then we are set back on her heels and poised for a "learning experience." When that happens, our memory and knowledge base are taxed. The facility for *imagining* things – for ransacking experience for something that may only vaguely resemble what we are faced with now, however mad and unlikely its relevance may have seemed before things broke down – and doing this again and again – now comes to the fore. Our survival hangs on how creative we can, or are allowed, to be. Depending on the gravity of the challenge, our hunches *better* work, or the game is over.

We are here

Again, that we are here, means this performance has worked pretty well so far. But there are no guarantees. There may be biologically recessive imperatives operating under the radar of typical consciousness that determine an expiration date for us. (E.g. Freud entertained a "death extinct." Many historians, demographers, and some antinatalist philosophers see evidence for this. We were never meant to be "forever," not even virtually. What – *in nature* – ever gave us that idea?[8])

6. Through causal descendants: biological progeny, semi-biological, or even any utterly artificial ones we can imagine having us in their causal history. As long we may stretch our imagination so far… When that facility ebbs, our existence fades.
7. See our previous topic on causation and correlation.
8. It is hard to explain a *thoroughly secular vision* of the world to the extent it tries to salvage a reason to go on. We do not need to believe in God to realize that *believing in something* is an evolutionary legacy. Post Enlightenment, *humanity* was substituted for God as the object of faith. *Animality* is where we are at now. This, too, the transhumanist may envision may pass.

Of course, we seem to have a budget for error. Again, we wouldn't be here if this weren't true, given how flawful we are. Nature has been kind thus far. Many times we, collectively, nearly exited. The room for error is where evolution can play. Evolution needs elbow room. It needs allowance for trial and error. Mostly error. *This* behavior is selected for and *that* against. Existence *for a term* is required. Certainly, innocents fall by the wayside (e.g., dinosaurs), but thanks to that, we are here. And those causally-related to us in the future, if any, will have us to thank. But we will *need to be gone first*, for them to thank us... or the theory of evolution is wrong. For it implies that for something new to happen the old has to go. We are *always* getting old.

The biological imperative

At the core of Barrett's theory of reality-generation is the Darwinian intuition that we are continuous with prior forms of life. We are not, as people in Descartes' time thought, something over and above "animal," that we were a composite of the material and something utterly different from the material, "clearly and distinctly," something immaterial: soul, mind, spirit, or more recently, something cognitive, a "thinking thing" not wholly reducible to the material. Modern biology accepts we are 100% animal, not any proportion less. Animalism subsumes humanism. Nothing, absolutely nothing, we can do cannot also be done in some degree by some other animal. Indeed, some animals have capabilities we seem to have lost, if we ever had them. Moreover, *if survival is the ultimate function*, clearly many animals have shown themselves better at it than us. In fact, the simpler the animal the more this is true. Think of cockroaches or tardigrades. We demand a lot of survival. That we evolved to make these complex demands is evidence we also evolved capabilities amazing in degree – but not in kind – from any found elsewhere in nature. This much science keeps reminding us of.

Presentation notes

Historical background of the debate: Descartes and the Princess.

Empiricist George Berkeley went so far as to deny Descartes' dualism and assert there is *just* mind, to be is to be perceived (*esse ist percipi*). If information about it doesn't pass *through a mind*, a thing has no claim to reality. There is *only* mind. All that exists exists inside one. Yours, mine, a cockroach's, God's...

Barrett's claim is not quite Berkeley's but is reminiscent of it.[9] There is a "reality," *one reality,* that encompasses all. It is composed of *signals*, quantities varying over time. Signals are things that may be detected by, or impinge on, something or other. When signals encounter each other a "thing," an entity, comes into being. Living things are places (among those we know of) where these collisions occur. The name we make up for where these collisions occur, at least, in human-like entities is the "brain." But there is no reason to conclude that other locations may not also create, host, and generate signals, such as muscles, etc. (See the "brainlessness" discussion in Resources.) Between the forces of entropy which

9. She seems to prefer to brand her theory a species of "realism": *relational realism*. This may have to do with the fact that traditional materialist realism is still much in vogue, usually taking the form of Naturalism. Perhaps it is more cognitively economical, in the present context, to do so… or as she might put it, more "metabolically efficient." Still "shit" though. The reason for the deprecatory term is the disappointment we feel because we were expecting something more, something more sublime, beautiful, and/or edifying – as arresting as Euler's Identity is to a mathematician. "Shit" expresses epistemic humiliation.

are perennially in the business of breaking organization down to the simpler elements of the universe – decay – and the mysterious imperatives (survival and what conduces to it) that assert themselves in certain combinations of stuff to create and preserve organization, *i.e.*, *life*, there is this momentary *drama*. The stage where we perform existence.

Resources

1. **Daniel Bonevac** briefly presents: "Princess Elizabeth on the Mind-Body Problem."

2. Jonathan Bennett has this annotated selection from the "Correspondence between Descartes and Princess Elisabeth." And the full text of their correspondence is in Lisa Shapiro's book, *The Correspondence Between Princess Elisabeth of Bohemia and René Descartes*.

3. **Lisa Feldman Barrett** – Pufendorf Lectures 2024: Barrett in these three lectures outlines her thesis that what we feel and think about, and what we judge the world and all its contents to be is an anthropogenic concoction. Goodbye mind-body problem! *Interacting signals* create the conditions for both.

> Day 1 - Constructing Emotion
> She started by wondering about a mistake owing to Darwin.
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> Day 2 - Constructing the Mind
> How prediction works (and backward causation) at 32 minutes in.
>
> Day 3 - Relational Realism
> Waxing philosophical, she expounds her full-blown theory of what is real.

See also "Constructionist Approaches to Emotion in Psychology and Related Fields," Lisa Feldman Barrett and Tsiona Lida, *Interdisciplinary Affective Science Laboratory,* in press, 2024.

3. **Brainlessness** – can minds exist without brains? How *necessary* are brains? Do plants have them? If brains are optional for the business of survival, and survival is what it is all about, we may wonder. How about minds? "Intelligence Without Brains" is a discussion by some experts. From the description:

> How much brain do you need to be smart? Bees and ants perform marvels as colonies, though each insect has barely any brain. And plants—with no brain at all—exhibit behaviors that, by any definition, count as intelligent. Brace yourself for a mind-bending exploration of plants that learn new behaviors and warn their brainless fellows of danger; vines that compete with each other; molds that solve puzzles; and trees that communicate and cooperate through a 'wood-wide web' of microscopic mycological fibers. Perhaps the real question is, are we smart enough to appreciate the vast range of intelligence that surrounds us?
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> PARTICIPANTS: Monica Gagliano, Simon Garnier, Thomas Horton, Naomi Leonard, Mark Moffett. MODERATOR: Natalie Angier

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We may ask: *is* survival what it's all about? We consider the notion that it is *not* in the final sections of "Procreative ethics and extinction | part 2."

4. **Neuroscience and mind reading –** How accessible, or *private*, are mental contents? Two *60 Minutes* episodes explore relevant advancements in neuroscience: part 1, 2009 and part 2, 2019, an update. The frontiers of what *can* be private are being pushed back. Supposing the descriptive/propositional content of our mental lives are not doomed to solipsistic inaccessibility, that some day our innermost thoughts and feelings will be transparent to others, is this *propositional* content really what we *treasure – and so wish to hoard* – when we claim to value our privacy? There remains the normative/qualitative aspect of experience, the what-it-is-like-to-beness, of having or being in a fully describable/propositional condition of existence. You may learn *what* I am thinking. Can you know what it is like *for me* to be thinking it? Moreover, what can it be like, or mean, *for you* to have this knowledge *about me?* And why should *that*, in turn, matter to me?

The problem is that value is not a description of anything. If it were, it might, *in theory*, be communicable. At some point, I will mount an argument for the truth of normative solipsism… there is even *in theory* only so much we may share with others – on pain of dissolving wholly into the mix of a conceptual edifice only extensionally concerned with us. In other words, though our molecules, post our decay into them, may remain serviceable to the universe indefinitely as fertilizer, *nothing else* about us is. We may "die so slowly that none call it murder" (to cite Samuel Taylor Coleridge)…

Perhaps we may conquer death in this way: by *blurring* the lines between it and what comes before. We won't just make shit, we'll become it.

5. **Climate change and neuroscience –** "Protecting the climate - How the human brain prevents us from saving the world | DW Documentary." Are we too stupid to do anything about climate change?

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Our future selves are strangers to us. Much as our past selves. And this even in the absence of intentional self alteration, *i.e.* even with no transhumanist aspiration or intervention. Parfit's non-identity problem looms.

"Stupidity," as used here, is a description, *not* an innuendo. This assessment is neutral on what, if anything, should or could be done about it. A more correct *scientific* (hence, aesthetic) attitude is bemusement. Moral outrage does not need science to back it up. In fact, it is immoral to recruit it. For that suggests morality is contingent, and not categorical. Science is nothing if not contingent. Like art.

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As Erwin Schrodinger put it,

LIVING MATTER EVADES THE DECAY TO EQUILIBRIUM

What is the characteristic feature of life? When is a piece of matter said to be alive? When it goes on 'doing something', moving, exchanging material with its environment, and so forth, and that for a much longer period than we would expect an inanimate piece of matter to 'keep going' under similar circumstances. When a system that is not alive is isolated or placed in a uniform environment, all motion usually comes to a standstill very soon as a result of various kinds of friction; differences of electric or chemical potential are equalized, substances which tend to form a chemical compound do so, temperature becomes uniform by heat conduction. After that the whole system fades away into a dead, inert lump of matter. A permanent state is reached, in which no observable events occur. The physicist calls this the state of thermodynamical equilibrium, or of 'maximum entropy'.[10]

Extended writeup for the topic hosted at
The Philosophy Club in October 2024
Accessible at Archive.org

– Victor Muñoz
Guanajuato / Seattle

10. In *What Is Life? The Physical Aspect of the Living Cell With Mind And Matter & Autobiographical Sketches* (1944), 14th printing, Cambridge University Press 2013, p. 69.